

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	11062	(510/176 or 510/175 or 134/3 or 510/212 or 134/2 or 510/505 or 510/500 or 510/255 or 510/206 or 430/331).ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:09
L2	17274	(alkylbenzenesulfonic or (benzenesulfonic adj acid))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:16
L3	58503	(alkylbenzenesulfonic or (benzenesulfonic adj acid) or (toluenesulfonic adj acid) or (dodecylbenzenesulfonic adj acid) or (tetrapropylbenzenesulfonic adj acid))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:16
L4	92732	(alkylbenzenesulfonic or (benzenesulfonic adj acid) or (toluenesulfonic adj acid) or (dodecylbenzenesulfonic adj acid) or (tetrapropylbenzenesulfonic adj acid) or (phenolsulfonic adj acid) or (benzene adj sulfonic) or (toluene adj sulfonic) or (dodecylbenzene adj sulfonic) or (tetrapropylbenzene adj sulfonic) or (phenol adj sulfonic) or (benzene adj sulfonic adj acid) or (toluene adj sulfonic adj acid) or (xylene adj sulfonic) or (phenol adj sulfonic adj acid) or (cresol adj sulfonic) or (sulfosalicylic adj acid) or (nitro adj benzene adj sulfonic) or (amino adj benzene adj sulfonic) or (alkylbenzenesulfonic adj acid) or (dodecylbenzene adj sulfonate) or (dodecyl adj benzene adj sulfonate) or (dodecylbenzene adj sulfonic) or (dodecyl adj benzene adj sulfonate) or (dodecyl adj benzene adj sulfonic) or (dodecyl adj benzene adj sulfonate) or (dodecyl adj benzene adj sulfonic))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 12:36
L5	28443	(glycoether or (glycol adj ether) or ethyleneglycolmethylether or ethyleneglycolethylether or (diethylene adj glycol adj propyl adj ether) or ethyleneglycolbutylether or diethyleneglycolmethylether or (diethylene adj glycol adj ethyl adj ether) or diethyleneglycolethylether or diethyleneglycolpropylether or (diethylene adj glycol adj methyl adj ether) or ethyleneglycolmethylether or ethyleneglycolethylether or ethyleneglycolbutylether or diethyleneglycolmethylether or diethyleneglycolethylether or diethyleneglycolpropylether or (glycol adj ether) or (ethylene adj glycol adj methyl adj ether) or (ethylene adj glycol adj ethyl adj ether) or (ethylene adj glycol adj butyl adj ether) or (diethylene adj glycol adj methyl adj ether) or (diethylene adj glycol adj ethyl adj ether) or (diethylene adj glycol adj propyl adj ether) or (ethylene adj glycol adj methyl adj ether) or (ethylene adj glycol adj ethyl adj ether) or (ethylene adj glycol adj butyl adj ether))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:42
L6	117262	((corrosion adj inhibitor) or triazole or (mercapto adj compound) or mercapto)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:18
L7	66058	(triazole or tolyltriazole or benzotriazole or aminotriazole or carboxylbenzotriazole)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:18

L8	71366	((mercapto adj compound) or mercapto)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:18
L9	215286	((claimed adj antioxidant) or (succinic adj acid) or (benzoic adj acid) or (citric adj acid) or catechol or (mercapto adj compound) or mercaptobenzodiazole or mercaptoethanol or mercaptopropanediol or (mercaptosuccinic adj acid))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:18
L10	1793404	((preferred adj substrate) or (liquid adj crystal adj display) or (copper-compatible adj resist) or (copper adj lines) or photoresist or semiconductor)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:51
L11	100	((("6379875") or ("6274296") or ("6350560") or ("6488754") or ("6716803") or ("6585825") or ("6310019") or ("6869921") or ("6534458") or ("6599370") or ("5217637") or ("4169074") or ("5980882") or ("6554912") or ("6534462") or ("6773873") or ("5509969") or ("4115309") or ("6736954") or ("6106774") or ("6824623") or ("6265309") or ("4511488") or ("4110242") or ("6562719") or ("5705089") or ("6740629") or ("5215872") or ("6015455") or ("6815151") or ("5250409") or ("5015410") or ("3950391") or ("6802870") or ("6511547") or ("6455479") or ("6736857") or ("6896744") or ("6372410") or ("5750482") or ("5250402") or ("6773476") or ("3943163") or ("6228823") or ("5885362") or ("4666615") or ("6068000") or ("6248704") or ("5409804") or ("5763377") or ("5905063") or ("5792274") or ("4010278") or ("5968848") or ("5145487") or ("4952488") or ("5110317") or ("5468422") or ("6514297") or ("5230708") or ("6558879") or ("5972865") or ("6902590") or ("6669785") or ("6902880") or ("5250401") or ("5648324") or ("6268323") or ("6372050") or ("5665688") or ("5637559") or ("6894054") or ("6777380") or ("6582761") or ("5798323") or ("4011213") or ("5498805") or ("4737306") or ("5277836") or ("5990072") or ("5952287") or ("6905555") or ("4595519") or ("6071867") or ("5988186") or ("5759973") or ("3958007") or ("6364544") or ("4018926") or ("4419260") or ("5571886") or ("5728664") or ("6033993") or ("6617286") or ("6538092") or ("6683333") or ("4764454") or ("5102566") or ("5545353") or ("6746621"))).PN.	USPAT	OR	OFF	2005/06/27 11:18
L12	11	((("6379875") or ("6274296") or ("6350560") or ("6488754") or ("6716803") or ("6585825") or ("6310019") or ("6869921") or ("6534458") or ("6599370") or ("5217637"))).PN.	USPAT	OR	OFF	2005/06/27 12:00
L13	238	10 and (6 or 7 or 8 or 9) and 5 and 4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:21
L14	122	10 and (6 or 7 or 8 or 9) and 5 and 4	USPAT	OR	OFF	2005/06/27 11:20
L15	8	14 and 11	USPAT	OR	OFF	2005/06/27 11:20
L16	214	14 or 11	USPAT	OR	OFF	2005/06/27 11:20
L17	230	13 not 11	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:22

L18	24	13 and 1	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:36
L19	100	((("6379875") or ("6274296") or ("6350560") or ("6554912") or ("6869921") or ("6815151") or ("6773873") or ("6488754") or ("6585825") or ("6716803") or ("5217637") or ("6562719") or ("6310019") or ("6511547") or ("6455479") or ("6534458") or ("6740629") or ("6599370") or ("4169074") or ("6268323") or ("6372050") or ("6372410") or ("6265309") or ("6248704") or ("6068000") or ("5798323") or ("6558879") or ("5792274") or ("5905063") or ("6534462") or ("5509969") or ("5968848") or ("6106774") or ("6896744") or ("5980882") or ("6773476") or ("6736954") or ("6824623") or ("5705089") or ("4115309") or ("6033993") or ("6669785") or ("5648324") or ("4110242") or ("5250409") or ("5665688") or ("6228823") or ("6777380") or ("5215872") or ("5885362") or ("5015410") or ("6905555") or ("6015455") or ("5759973") or ("4511488") or ("5250402") or ("3950391") or ("5545353") or ("4595519") or ("5763377") or ("6736857") or ("6802870") or ("5988186") or ("3943163") or ("5750482") or ("5110317") or ("5230708") or ("6902590") or ("5728664") or ("6894054") or ("5409804") or ("6514297") or ("6683333") or ("6902880") or ("5145487") or ("6582761") or ("5972865") or ("6617286") or ("6364544") or ("4952488") or ("5250401") or ("5468422") or ("5637559") or ("4010278") or ("6746621") or ("6538092") or ("6071867") or ("4666615") or ("4737306") or ("4764454") or ("4011213") or ("5102566") or ("5571886") or ("5498805") or ("5277836") or ("5990072") or ("5952287") or ("4419260") or ("3958007") or ("4018926"))).PN.	USPAT	OR	OFF	2005/06/27 11:37
L20	499	1 and 4	USPAT	OR	OFF	2005/06/27 11:37
L21	80	19 and 4	USPAT	OR	OFF	2005/06/27 11:37
L22	41	21 and 5	USPAT	OR	OFF	2005/06/27 11:37
L23	9111	(alkylbenzenesulfonic or (benzenesulfonic adj acid) or (toluenesulfonic adj acid) or (dodecylbenzenesulfonic adj acid) or (tetrapropylbenzenesulfonic adj acid) or (phenolsulfonic adj acid) or (benzene adj sulfonic) or (toluene adj sulfonic) or (dodecylbenzene adj sulfonic) or (tetrapropylbenzene adj sulfonic) or (phenol adj sulfonic) or (benzene adj sulfonic adj acid) or (toluene adj sulfonic adj acid) or (xylene adj sulfonic) or (phenol adj sulfonic adj acid) or (cresol adj sulfonic) or (sulfosalicylic adj acid) or (nitro adj benzene adj sulfonic) or (amino adj benzene adj sulfonic) or (alkylbenzenesulfonic adj acid) or (dodecylbenzene adj sulfonate) or (dodecyl adj benzene adj sulfonate) or (dodecylbenzene adj sulfonic) or (dodecyl adj benzene adj sulfonate) or (dodecyl adj benzene adj sulfonate) or (dodecyl adj benzene adj sulfonic)).ti,ab,clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:42
L24	8633	(glycoether or (glycol adj ether) or ethyleneglycolmethylether or ethyleneglycolethylether or (diethylene adj glycol adj propyl adj ether) or ethyleneglycolbutylether or diethyleneglycolmethylether or (diethylene adj glycol adj ethyl adj ether) or diethyleneglycolethylether or diethyleneglycolpropylether or (diethylene adj glycol adj methyl adj ether) or ethyleneglycolmethylether or ethyleneglycolethylether or ethyleneglycolbutylether or diethyleneglycolmethylether or diethyleneglycolethylether or diethyleneglycolpropylether or (glycol adj ether) or (ethylene adj glycol adj methyl adj ether) or (ethylene adj glycol adj ethyl adj ether) or (ethylene adj glycol adj butyl adj ether) or (diethylene adj glycol adj methyl adj ether) or (diethylene adj glycol adj ethyl adj ether) or (diethylene adj glycol adj propyl adj ether) or (ethylene adj glycol adj methyl adj ether) or (ethylene adj glycol adj ethyl adj ether) or (ethylene adj glycol adj butyl adj ether)).ti,ab,clm.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:42

L25	15	(photoresist or semiconductor or copper) and 23 and 24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:45
L26	99	23 and 24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:47
L27	317111	(sulfonate or sulfonic or sulphonate or sulphonic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:47
L28	1563	27 and 24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:47
L29	617	28 and (6 or 7 or 8 or 9)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:48
L30	29	29 and 10	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:48
L31	3652994	((preferred adj substrate) or (liquid adj crystal adj display) or (copper-compatible adj resist) or (copper adj lines) or photoresist or semiconductor or electronic or copper)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:52
L32	210	29 and 31	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:52
L33	97	32 and ("510"/\$ or "134"/\$ or "438"/\$ or "252"/\$).ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 11:53
L34	1	("4,786,578").PN.	USPAT	OR	OFF	2005/06/27 12:15

L35	640	(alkylbenzenesulfonic or (benzenesulfonic adj acid) or (toluenesulfonic adj acid) or (dodecylbenzenesulfonic adj acid) or (tetrapropylbenzenesulfonic adj acid) or (phenolsulfonic adj acid) or (benzene adj sulfonic) or (toluene adj sulfonic) or (dodecylbenzene adj sulfonic) or (tetrapropylbenzene adj sulfonic) or (phenol adj sulfonic) or (benzene adj sulfonic adj acid) or (toluene adj sulfonic adj acid) or (xylene adj sulfonic) or (phenol adj sulfonic adj acid) or (cresol adj sulfonic) or (sulfosalicylic adj acid) or (nitro adj benzene adj sulfonic) or (amino adj benzene adj sulfonic) or (alkylbenzenesulfonic adj acid) or (dodecylbenzene adj sulfonate) or (dodecyl adj benzene adj sulfonate) or (dodecylbenzene adj sulfonic) or (dodecyl adj benzene adj sulfonate) or (dodecyl adj benzene adj sulfonic) or (dodecyl adj benzene adj sulfonate) or (dodecyl adj benzene adj sulfonic)) same (glycoether or (glycol adj ether) or ethyleneglycolmethylether or ethyleneglycolether or (diethylene adj glycol adj propyl adj ether) or ethyleneglycolbutylether or diethyleneglycolmethylether or (diethylene adj glycol adj ethyl adj ether) or diethyleneglycolether or diethyleneglycolpropylether or (diethylene adj glycol adj methyl adj ether) or ethyleneglycolmethylether or ethyleneglycolether or ethyleneglycolether or ethyleneglycolbutylether or diethyleneglycolmethylether or diethyleneglycolether or diethyleneglycolpropylether or (glycol adj ether) or (ethylene adj glycol adj methyl adj ether) or (ethylene adj glycol adj ethyl adj ether) or (ethylene adj glycol adj butyl adj ether) or (diethylene adj glycol adj methyl adj ether) or (diethylene adj glycol adj ethyl adj ether) or (diethylene adj glycol adj propyl adj ether) or (ethylene adj glycol adj methyl adj ether) or (ethylene adj glycol adj ethyl adj ether) or (ethylene adj glycol adj butyl adj ether))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 12:37
L36	74	35 and ("510"/\$.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 12:38
L37	36	36 and (6 or 7 or 8 or 9)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 12:45
L38	2	37 and 19	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/06/27 12:41
L39	1	("6869921").PN.	USPAT	OR	OFF	2005/06/27 12:52
L40	2165	(glycoether or (glycol adj ether)).clm.	USPAT	OR	OFF	2005/06/27 12:53
L41	7013	((benzene or toluene or xylene or anionic or surfactant) same (sulfonate or sulfonic or sulphonate or sulphonic)).clm.	USPAT	OR	OFF	2005/06/27 12:54
L42	2401	41 and (((corrosion or rust) near3 (inhibitor or preventor)) or (6 or 7 or 8 or 9))	USPAT	OR	OFF	2005/06/27 12:55
L43	111	40 and 42	USPAT	OR	OFF	2005/06/27 12:55
L44	91	43 and ("510"/\$ or "134"/\$ or "252"/\$).ccls.	USPAT	OR	OFF	2005/06/27 13:00
L45	86	44 and (7 or 8 or 9)	USPAT	OR	OFF	2005/06/27 13:01
L46	3	45 and (triazole)	USPAT	OR	OFF	2005/06/27 13:01
L47	1	45 and (copper same corrosion)	USPAT	OR	OFF	2005/06/27 13:02
L48	4	43 and (copper same corrosion)	USPAT	OR	OFF	2005/06/27 13:11
L49	834	5 and 4 and (triazole or benzotriazole or aminotriazole)	USPAT	OR	OFF	2005/06/27 13:12
L50	37	49 and ("510"/\$ or "252"/\$ or "438"/\$).ccls.	USPAT	OR	OFF	2005/06/27 13:12

Serial Number:

10694951

Pgpub Number:

0

Keywords:

code;gyoo;chul;removing
copper;compatible;resist;alkylbenzenesulfonic;compound;glycoether;corrosion
inhibitor;inhibitor;gunpo;chae;gee;sung;yeongsu;kwon;nam;cheonan;lee;kyoung;mook;seo
ul;hwang;yong;suwon;kim;seong;bae;jang;

Class list:

510/176;510/175;134/3;510/212;134/2;510/505;510/500;510/255;510/206;430/331;

Int Class list:

C11D 007/32;C11D 007/26;C23G 001/02;C11D 007/50;B08B 003/04;G03F 007/42;C11D
009/00;G03C 005/00;C25D 003/58;C25D 003/56;

Special Keywords:

Negative Keywords:

Features:

feature#1(w=700);alkylbenzenesulfonic;benzenesulfonic acid;toluenesulfonic
acid;dodecylbenzenesulfonic acid;tetrapropylbenzenesulfonic acid;phenolsulfonic
acid;benzene sulfonic;toluene sulfonic;dodecylbenzene sulfonic ;tetrapropylbenzene
sulfonic;phenol sulfonic;benzene sulfonic acid;toluene sulfonic acid;m-xylene
sulfonic;phenol sulfonic acid;cresol sulfonic;sulfosalicylic acid;m-nitro benzene
sulfonic;p-amino benzene sulfonic;alkylbenzenesulfonic acid;dodecylbenzene
sulfonate;dodecyl benzene sulfonate;dodecylbenzene sulfonic;dodecyl benzene
sulfonate;dodecyl benzene sulfonate;dodecyl benzene sulfonic;
feature#2(w=700);glycoether;glycol
ether;ethyleneglycolmethylether;ethyleneglycolethylether;diethylene glycol propyl
ether;ethyleneglycolbutylether;diethyleneglycolmethylether;diethylene glycol ethyl
ether;diethyleneglycolethylether;diethyleneglycolpropylether;diethylene glycol
methyl
ether;ethyleneglycolmethylether;ethyleneglycolethylether;ethyleneglycolbutylether;di
ethyleneglycolmethylether;diethyleneglycolethylether;diethyleneglycolpropylether;gly
col ether;ethylene glycol methyl ether;ethylene glycol ethyl ether;ethylene glycol
butyl ether;diethylene glycol methyl ether;diethylene glycol ethyl ether;diethylene
glycol propyl ether;ethylene glycol methyl ether;ethylene glycol ethyl
ether;ethylene glycol butyl ether;
feature#3(w=300);corrosion inhibitor;triazole;mercapto compound;mercapto;
feature#4(w=100);triazole;tolyltriazole;benzotriazole;aminotriazole;carboxylbenzotri
azole;
feature#5(w=100);mercapto compound;mercapto;
feature#6(w=100);claimed antioxidant;succinic acid;benzoic acid;citric
acid;catechol;mercapto
compound;mercaptobenzodiazole;mercaptoethanol;mercaptopropanediol;mercaptosuccinic
acid;
feature#7(w=100);preferred substrate;liquid crystal display;copper-compatible
resist;copper lines;photoresist;semiconductor;

Percent Features:

feature#1:93%
feature#2:90%
feature#3:93%
feature#4:65%
feature#5:40%
feature#6:78%
feature#7:40%